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PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 51013 WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/IB 02/02318	International filing date (day/month/year) 21.06.2002	Priority date (day/month/year) 21.06.2002
International Patent Classification (IPC) or both national classification and IPC G06F3/023		
Applicant NOKIA CORPORATION et al.		

<ol style="list-style-type: none"> 1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 6 sheets, including this cover sheet. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). <p>These annexes consist of a total of 4 sheets.</p> 	
<ol style="list-style-type: none"> 3. This report contains indications relating to the following items: <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the opinion II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application 	

Date of submission of the demand 13.01.2004	Date of completion of this report 06.08.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu-d Fax: +49 89 2399 - 4465	Authorized Officer Marinov, I Telephone No. +49 89 2399-7145



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I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-20 as originally filed

Claims, Numbers

1-16 received on 17.05.2004 with letter of 17.05.2004

Drawings, Sheets

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

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5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	5,8-10,16
	No: Claims	1-4,6,7,11-15
Inventive step (IS)	Yes: Claims	
	No: Claims	1-16
Industrial applicability (IA)	Yes: Claims	1-16
	No: Claims	

2. Citations and explanations

see separate sheet

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Re Item V

1. In view of the arguments submitted by the applicant with his letter of 17.05.2004 the examiner is still of the opinion that the new set of claims 1-16 do not meet the requirements of the PCT for the following reasons:

- 1.1. The following documents are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: SIEMENS SL45 USER GUIDE, 31 December 2000, SIEMENS AG

- 1.2. Document D1, which is considered to represent the most relevant state of the art, discloses a mobile communication device (see page 5, column 1, "phone"), comprising a plurality of device applications (see page 12, "phone call"; page 18, "Addressbook") including a digital music player (see page 25, "MP3 Player"), a mode selector (see page 26, "Options"- "Create playlist" and "Return to the MP3 player list") for switching an input mode into a first mode (see page 26, "Create playlists") and into a second mode (see page 25, "Play"), the mode selector being operable to change modes in at least one application (see page 25, "MP3 Player"). The mobile communication device also comprising a multiple input switch (see page 4, "Control key") the switch being operable to receive a user input and to generate and transmit commands to a plurality of device applications (see page 25, "MP3 Player" and page 31, "Calendar"). The commands include a first set of commands (see page 26, "select melody in the MP3 player list") operable with the input mode being in the first mode and a second set of commands (see page 25, section "Control", "Jump forward or back one track", "Play/pause") with the input mode being in the second mode (see page 25, "Play"). The first set of commands corresponding to the first mode are adapted to control device applications (see page 26, "MP3 Player") and the second set of commands corresponding to the second mode are adapted to control a set of music player functions (see page 25, "MP3 Player") wherein said second mode is exclusively dedicated to said controlling of said music player functions (see D1, page 26) independent from the current operation mode of said mobile communication device.

The subject matter of **claim 1** appears to differ from that known from D1 in

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the following features: a controller connected to the multiple input switch and to the mode selector.

However, using a controller to scan the keyboard and to generate and transmit commands to the device applications is the usual arrangement used for electronic devices with a keyboard and is therefore considered implicitly disclosed in D1.

The applicant argues that the object of the invention is to provide that the operating of the digital music player does not interfere with the operating of an application currently running on the mobile communication device. However, the amended feature of *the second mode being exclusively dedicated to the controlling of the music player functions, independent from the current operation mode of the mobile communication device* does not disclose a simultaneous operation of a music player and another application (see also D1, page 27, "You have a call"). It merely discloses that the second mode controls the music player functions exclusively, since it is not clear what "independent from the current operation mode of the mobile communication device" means.

Therefore, the subject-matter of **claim 1** is not new (Article 33(2) and (3) PCT).

- 1.3. The subject-matter of dependent **claims 2-4, 6, 7 and 11-14** is not new, therefore, **claims 2-4, 6, 7 and 11-14** do not meet the requirements of Article 33(2) and (3). The reasons being as follows:
 - a. The additional features of **claims 2-4, 6 and 7** are disclosed in D1, page 25, section "Control";
 - b. The additional features of **claim 11, 13 and 14** are disclosed in D1, page 25, section "Play";
 - c. The additional features of **claim 12** are the usual arrangement used for electronic devices with a display and are therefore considered implicitly disclosed in D1.

Thus, the subject-matter of **claims 2-4, 6, 7 and 11-14** is not new in respect

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of the disclosure of document D1.

- 1.4. The subject-matter of dependent **claims 5 and 8-10** does not involve an inventive step, therefore, **claims 5 and 8-10** do not meet the requirements of Article 33(3). The reasons being as follows:

The additional features of **claims 5 and 8-10** are obvious design possibilities;

Thus, the subject-matter of **claims 5 and 8-10** does not involve an inventive step in respect of the disclosure of document D1.

- 1.5. Same objections as formulated above for independent **claim 1** can be raised with respect to the correspondingly worded independent method **claim 15**.

An additional feature specified in **claim 15** is that the device application, receiving the first set of generated commands is the digital music player. This feature has also been disclosed in **D1** (see page 26, "MP3 Player").

Thus the subject matter of **claim 15** is not new (Article 33(2) PCT).

- 1.6. The subject-matter of dependent **claim 16** does not involve an inventive step, The reasons being as follows:

The additional features of **claim 16** are obvious design possibilities.

Therefore, **claim 16** does not meet the requirements of Article 33(3).

Reclam 02 de 04

Claims

1. A mobile communication device, comprising:

- 5 - a plurality of device applications including a digital music player (230);
- a mode selector (SK1, SK2, 110) for switching an input mode into a first mode and into a second mode, said mode selector (SK1, SK2, 110) being operable to change modes in at least one application;
- 10 - a multiple input switch (NK0, NK1, NK2, 100), said switch being operable to receive a user input; and
- a controller (210) connected to said multiple input switch (NK0, NK1, NK2, 100) and to said mode selector (SK1, SK2, 110), adapted to generate commands and adapted to transmit said commands to one of the plurality of device applications;
characterized in that
- 15 - said commands include a first set of commands operable with said input mode being in said first mode and a second set of commands with said input mode being in said second mode;
- wherein said first set of commands corresponding to said first mode are adapted to control device applications; and
- 20 - said second set of commands corresponding to said second mode are adapted to control a set of music player functions;

2. Mobile communication device according to claim 1, wherein a plurality of pieces of music are arranged in a predetermined sequence, characterized in that

- 25 said second set of commands comprises commands out of a group comprising:
 - a starting function of the music reproduction;
 - a stopping function of the music reproduction;
 - a fast forward winding function of the reproduced piece of music;
 - a fast backward winding function of the reproduced piece of music;
 - a skipping forward function to a subsequent piece of music; and
 - a skipping backward function to a preceding piece of music

3. Mobile communication device according to claim 2, characterized in that said fast forward winding function of the reproduced piece of music and said fast backward winding function of the reproduced piece of music are activated by pressing and holding said multiple input switch (NK0, NK1, NK2,100) in said input mode being in said second mode for a certain period of time.
5
4. Mobile communication device according to claim 2 or claim 3, characterized in that said skipping forward function to a subsequent piece of music and said skipping backward function to a preceding of music are activated by pressing and releasing said multiple input switch (NK0, NK1, NK2,100) in said input mode being in said second mode for a certain
10 period of time.
5. Mobile communication device according to anyone of the claims 2 to 4, characterized in that said mode selector (SK1, SK2, 110) is reserved for switching exclusively said input mode into said first mode and said second mode, wherein said second mode is exclusively
15 dedicated to said controlling of said music player functions.
6. Mobile communication device according to anyone of the claims 2 or 5, characterized in that said multiple input switch has at least four switching positions, wherein
20
 - said at least four switching positions comprises a first set of switching positions and a second set of switching positions, said switching positions of said first set and said second set being arranged opposite to each other;
 - wherein said multiple input switch operated in one position of said first and/or second set of switching positions causes a commands out of said second set of commands corresponding to said input mode being in second mode;
 - wherein said multiple input switch operated in one position of said first set of switching positions causes a command out of said second set of commands comprising at least browsing functions to control a user interface and corresponding to said input mode being in first mode.
25

7. Mobile communication device according claim 6, characterized in that said first set of switching positions is arranged along a first line and said second set of switching positions is arranged along a second line being substantially perpendicular to said first line.
- 5 8. Mobile communication device according to claim 1, characterized in that
 - a third set of commands is provided operable with said input mode being in said first or said second mode, said third set of commands being adapted to control a subset of music player functions.
- 10 9. Mobile communication device according to anyone of the preceding claims, characterized in that said switching of said input mode operable in said first mode and said second mode is operable with at least one application of said plurality of applications.
- 15 10. Mobile communication device according to anyone of the preceding claims, characterized in that at least a set of symbols printed on said multiple input switch (NK0, NK1, NK2, 100) indicates said music player functions to be controlled and wherein said set of symbols and said mode selector (SK1, SK2, 110) have substantially a common color.
- 20 11. Mobile communication device according to anyone of the preceding claims, characterized in that said second mode is active during depressing and holding said mode selector (SK1, SK2, 110).
12. Mobile communication device according anyone of the preceding claims, further comprising:
25
 - a user interface being adapted to control said device applications,
characterized in that
said first set of commands is adapted to provide a browsing function through said user interface.
- 30 13. Mobile communication device according to claim 12, further comprising:
 - a display (240) for displaying said user interface to a user, said display (240) being coupled to said controller (210) via a display driver (230).

14. Mobile communication device according to claim 13, characterized in that a music player control user interface is displayed to said user in said second mode.

5 15. Mobile communication device according to claim 13 or claim 14, characterized in that said input mode is automatically switched into said second mode in case a music player control user interface is displayed.

10 16. Method for controlling functions of a digital music player implemented in a mobile communication device, characterized by

- receiving a mode signal;
- switching an input mode into a first mode or into a second mode in accordance with said received mode signal;
- receiving an input signal;
- generating a command from said received input signal in combination with said input mode, said command being one of a plurality of commands including a first set of commands generated in said first mode and a second set of commands generated in said second mode;
- in case said generated command is one of said first set of commands, transmitting said generated command to one of a plurality of device applications including said digital music player to be controlled in accordance with said generated command; and
- in case said generated command is one of said second set of commands, transmitting said generated command to said digital music player to control a set of music player functions.

25 17. Method according to claim 16, characterized in that

- generating a command from said received input signal in combination with said input mode, said command being one of a plurality of commands including a first set of commands generated in said first mode, a second set of commands generated in said second mode and a third set of commands generated in said first mode and said second mode; and

- in case said generated command is one of said third set of commands, transmitting said generated command to said digital music player to control another set of music player functions.